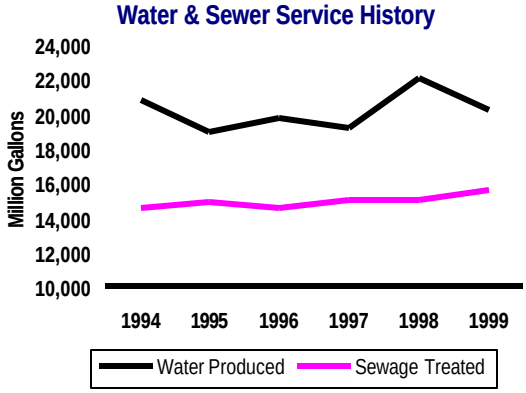
Water & Sewer

Mission. The mission of the Water and Sewer Department is to provide quality, reliable, customer-convenient water and sewer service to the citizens of Wichita.

The water treatment plant at Sim Park.

Overview. The Water and Sewer Department supplies and distributes high quality water, and collects and treats wastewater for the City of Wichita. Services provided include pumping and purifying water, maintaining the water distribution and wastewater collection systems, treating wastewater, managing facilities and planning for future needs.



The Water Utility produces, treats, and distributes approximately 20 billion gallons of water per year for its customers. The Sewer Utility collects and treats approximately 15 billion gallons per year from its customers. Service levels, and water consumption in particular, are driven primarily by system growth rates as well as weather conditions that affect consumption patterns. Despite the large volume of water produced and sewage treated, the Water & Sewer Utilities consistently exceed environmental regulations, often before such regulations are put into effect. This proactive approach assists in planning and helps to ensure that Utility customers receive excellent service value.

The Water Utility provides customers with treated water originating in Cheney Reservoir, the Equus Beds wellfield, and local supply wells. In accordance with state law and the comprehensive water supply plan, the Utility has sought to reduce the amount of water required from groundwater sources (wells) in an attempt to minimize impacts on groundwater supplies. In addition, the Utility is conducting a project to determine the feasibility of withdrawing excess rainfall from the Little Arkansas River during periods of wet weather. The water drawn from the river can then be injected into the aquifer to partially offset Utility withdrawals from the wellfield groundwater supply.

The Sewer Utility was recently given a National Pretreatment Excellence Award for its Industrial Pretreatment Program. This award is given to pretreatment programs that have achieved superior industrial compliance levels with wastewater discharge regulations and have implemented innovative mechanisms within the program. Some of the mechanisms used by the program include: a comprehensive inspection program; a biological monitoring program; a combined storm water and industrial monitoring program; and active participation in public education events like the Pretreatment Workshop and Boeing Earth Day Fair.

Finance and Operations. The 2000 and 2001 budgets represent some increases over previously approved budgets. Sources of these increases include revised debt service schedules, rescheduling of capital replacements based on equipment repair costs and downtime, and new contractual obligations, such as the contract to purchase raw water supplies from Valley Center and re-sell treated water back to that municipality. In addition, some additional allowances have been made in the budget to account for sales tax, which is still applicable to most Water Utility purchases and outlays.

Several recent initiatives related to improved customer service were continued in 1999. A new customer information and billing system was developed in 1999; this system will result in maximum flexibility for addressing, processing, customer inquiry and performance needs. The recent addition of an interactive voice response system will also improve customer service by decreasing the amount of time spent on the phone waiting for a service representative. Finally, a new meter reading crew was added in 1999 to deal with a recent expansion in the number and area of accounts served.

In 1999, substantial efforts were expended in a major upgrade of the Water and Sewer Laboratory. The upgrades were needed to ensure Year 2000 compliance and to achieve the testing accuracy and reliability necessary to continue meeting environmental regulations. Purchases included equipment and computer hardware and software upgrades to increase the efficiency of Lab operations.

Financial Summary
Combined Water & Sewer Revenues (in thousands)

	1999	2000	2001
Water sales revenue	30,388	27,720	29,500
Sewer sales revenue	20,528	22,740	24,210
Interest/other	4,282	5,829	6,180
Revenue - all sources	55,198	56,289	59,890

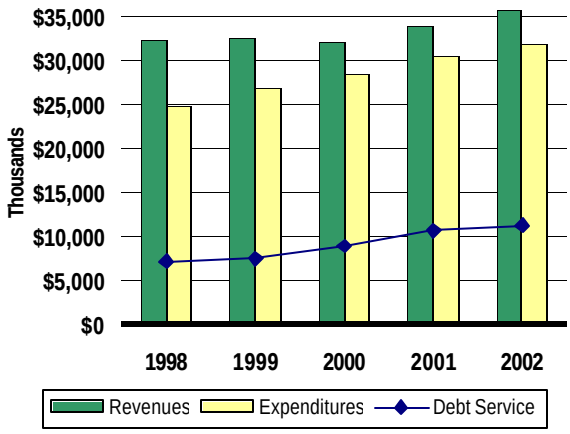
The Production and Pumping Division procures, treats, and pumps water from Cheney Reservoir and the City's local supply wells near Halstead to ensure that adequate water supply and pressure is available to citizens when needed. Costs associated with treatment and pumping of water, including electricity, chemical costs and infrastructure improvements, represent the largest single category of operations and maintenance expenditures in the Water Utility budget.

The Water Distribution Division maintains over 1,500 miles of water mains, 28,000 valves, 8,000 fire hydrants, and 150,000 water service lines and meter sets. Over 1,200 main and service line leaks are repaired every year. An ongoing preventive maintenance and inspection effort is underway to prevent leaks and breaks before they occur and require more expensive repair or reconstruction. The 2001-2002 Budget includes funding to transfer the fire hydrant maintenance function from the Fire Department to the Water Distribution Division in 2000.

Recently the Water Utility has been conducting pilot tests of a relatively new technology known as AMR, which stands for Automated Meter Reading. The AMR technology allows meters to be read electronically from a distance, enabling them to be read much faster, more efficiently, and with fewer errors. The 2001 and 2002 budgets include funding to begin the transfer to AMR by providing for the system's installation on all new metered services requested. As the technology continues to improve and the percentage of AMR-equipped meters increases throughout the City, meter reading errors and costs will be dramatically reduced.

Wastewater entering the sanitary sewer system receives primary treatment at Sewage Treatment Plant #1 (constructed in 1931) and secondary treatment at Plant #2 (constructed in 1960). The planned Northwest Sewage Treatment Plant (Plant #3) will add further capacity beginning in 2003. Sewer Utility staff operates and

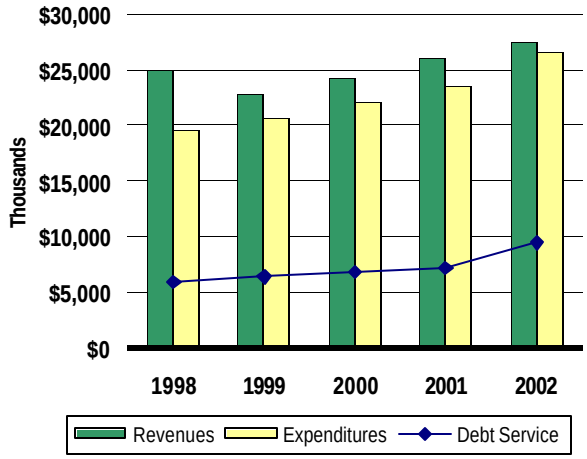
Water Utility Operations



maintains the treatment plants, five odor control injection sites and forty lift stations. In addition, Sewer Utility staff is responsible for cleaning and maintaining approximately 1,450 miles of sanitary sewer laterals, mains, interceptors and manholes. The aim of this activity is to prevent tree roots and other intrusions from blocking or damaging the system and to minimize inflow and infiltration from other sources that increase the volume of sewage reaching the plants, increasing the overall cost of treatment. The preventive maintenance program increases Utility efficiency by addressing problems before they occur, thereby eliminating the need for more expensive maintenance or repair.

The 2001 and 2002 Sewer Utility budget includes the addition of a sanitary sewer lift station mechanic and associated equipment to deal with recent and planned growth in the Sewer system and associated lift stations. The addition is necessary to provide adequate preventive maintenance and to help ensure that catastrophic breakdowns and sewage backups do not occur. The

Sewer Utility Operations



need for this addition is all the more telling given recent City annexations and improvements to sewer plants and the collection system that are planned for the near future, particularly in the west, northwest, and northeast sections of the City. Other initiatives

included in the 2001-2002 Sewer Utility budget relate to system and equipment maintenance and employee safety.

The Water Utility budget reflects a Council-approved five percent rate increase in 2000 with planned rate increases of five percent in 2001 and seven percent in 2002. Sewer Utility revenue projections take into account the Council-approved three percent increase for 2000 and planned rate increases of five percent annually in 2001 and 2002. Rate increases are necessary due to increasing Capital Improvement Program expenditures and debt service coverage restrictions in bond covenants. Any future rate changes will be subject to review and approval by the City Council.

Annual Water & Sewer Rate Increases (projected for 2001-2002)

	2000	2001	2002
Water rate increases	5%	5%	7%
Sewer rate increases	3%	5%	5%

Debt service is the primary variable affecting the rate structure of each utility. Planned rate changes are in accordance with staff recommendations to raise rates moderately in anticipation of large capital expenditures associated with the upcoming Water Supply Plan and the new Northwest Sewage Treatment Plant. Raising rates by smaller amounts a few years before funding needs mature will ensure that capital financing needs can be met without double-digit rate increases.

Because of sound fiscal management and planning for future capacity and financing needs, the Water and Sewer Utilities enter the millennium in a sound financial position. This not only minimizes rate increases as new capital needs emerge, but also leads to a higher bond rating given by financial institutions evaluating Utility bonds. A higher bond rating reduces overall debt service costs by reducing the amount of interest at which debt can be issued in any given year. Part of this financial strategy involves financing of capital improvements through cash reserves, which further reduces the cost of improvements by eliminating bond issuance and interest costs.

Bonded Debt Service Coverage Ratio (must equal or exceed 120%)

	2000	2001	2002
Water coverage ratio	214%	182%	174%
Sewer coverage ratio	173%	175%	157%

Revenue bond covenants require that after operating and maintenance expenses, net annual revenues must equal at least 120 percent of the annual debt service payments for principal and interest. This is the bonded debt coverage ratio. A higher ratio provides a cushion against fluctuations in utility revenues (which can be significant given the impact of weather changes on utility revenues). Bond rating agencies and the bond market typically rate utilities as superior if the bond coverage ratio is relatively high.

Water Rate Structure (cost per thousand gallons)

	Inside-City Rate	Outside-City Rate
Block 1 (0-110% AWC)	$0.62	$0.96
Block 2 (111-310% AWC)	$2.23	$3.46
Block 3 (above 310% AWC)	$3.35	$5.19

Water rates are based on a customer's average winter consumption (AWC), which is defined as the mean monthly consumption calculated during the months of December, January, February and March. The AWC is calculated in April and is used as the basis for billings in the ensuing twelve months. The minimum monthly AWC for any metered service on a meter sized at one inch or less is 6,000 gallons. In addition, a minimum monthly charge is assessed for all customers regardless of consumption. The water rate increases as consumption moves up from one block to the next. The AWC rate structure is designed to encourage conservation by imposing a penalty on excessive water usage.

Selected Performance Measures

	1998	1999	2000	2001
Water main breaks per 1,000 line miles	729	724	718	716
Sewer stoppages per 1,000 line miles	297	367	367	370

Water Utility Fund Budget Summary

	1999 Actual	2000 Adopted	2000 Revised	2001 Adopted	2002 Approved
Water Utility Fund Revenue	**32,429,307**	**31,310,000**	**32,010,000**	**33,830,000**	**35,540,000**
Personal Services	5,702,239	7,193,390	6,881,250	7,409,940	8,020,500
Contractual Services	5,808,707	6,406,100	6,562,330	6,406,570	6,487,190
Commodities	1,744,984	3,039,760	2,581,460	2,724,530	2,748,330
Capital Outlay	3,460,268	671,460	740,640	632,300	664,630
Other	9,978,593	11,443,000	11,646,040	13,535,500	14,331,590
Total Water Utility Fund Expenditures	**26,694,791**	**28,753,710**	**28,411,720**	**30,708,840**	**32,252,240**
Revenue Over (Under) Expenditures	5,734,516	2,556,290	3,598,280	3,121,160	3,287,760
Transfer to Reserves	**5,734,516**	**2,556,290**	**3,598,280**	**3,121,160**	**3,287,760**
Position Summary					
Total full-time	177	177	178	178	179
Total part-time	37	37	37	37	37
Total FTE	200.75	200.75	201.75	201.75	202.75

Sewer Utility Fund Budget Summary

	1999 Actual	2000 Adopted	2000 Revised	2001 Adopted	2002 Approved
Sewer Utility Fund Revenue	**22,768,876**	**26,332,000**	**24,279,000**	**26,060,000**	**27,422,000**
Personal Services	6,544,283	7,464,570	7,034,510	7,623,530	8,241,300
Contractual Services	3,207,524	3,506,950	3,514,920	3,935,890	4,271,610
Commodities	1,739,435	1,874,520	1,823,950	1,860,830	1,906,660
Capital Outlay	759,984	913,740	884,330	968,590	1,056,550
Other	8,290,481	8,053,470	8,856,430	9,324,040	11,650,680
Total Sewer Utility Fund Expenditures	**20,541,707**	**21,813,250**	**22,114,140**	**23,712,880**	**27,126,800**
Revenue Over (Under) Expenditures	2,227,169	4,518,750	2,164,860	2,347,120	295,200
Transfer to Reserves	**2,227,169**	**4,518,750**	**2,164,860**	**2,347,120**	**295,200**
Position Summary					
Total full-time	142	142	141	142	142
Total part-time	1	1	1	1	1
Total FTE	142.5	142.5	141.5	142.5	142.5